

Running Head: Delivering the TRICARE Promise at Ft. Carson

Graduate Management Project
(GMP)

Delivering the TRICARE Promise at Fort Carson

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Submitted to LTC Brett Walker
In Fulfillment of the Requirements for
Completion of the Administrative Residency Phase
U.S. Army-Baylor University Program in Healthcare Administration
14 April 2000

Report Documentation Page		
Report Date 00 Aug 2000	Report Type N/A	Dates Covered (from... to) -
Title and Subtitle Delivering the TRICARE Promise at Fort Carson		Contract Number
		Grant Number
		Program Element Number
Author(s)		Project Number
		Task Number
		Work Unit Number
Performing Organization Name(s) and Address(es) USA MEDDAC Ft. Carson, CO		Performing Organization Report Number
Sponsoring/Monitoring Agency Name(s) and Address(es)		Sponsor/Monitor's Acronym(s)
		Sponsor/Monitor's Report Number(s)
Distribution/Availability Statement Approved for public release, distribution unlimited		
Supplementary Notes		
Abstract		
Subject Terms		
Report Classification unclassified		Classification of this page unclassified
Classification of Abstract unclassified		Limitation of Abstract UU
Number of Pages 48		

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ABSTRACT

Delivering the TRICARE Promise involves compliance with specific standards especially in the area of access. The TRICARE pamphlets that are given to beneficiaries state that they should get an acute appointment within 24 hours and for routine care an appointment within one week. Prevention/wellness appointments are scheduled within a month. Patients should have to wait no longer than 30 minutes to see a provider during an appointment. The pamphlets also state that the beneficiary gets to choose their own individual primary care manager. At Fort Carson a conscious decision was made to enroll to teams or clinics not individual primary care managers based on medical need. Active duty patients on sick call are exempt from the standard of waiting no longer than 30 minutes to see a provider. The Surgeon General's directive in July of 1999 for all beneficiaries to be assigned to an individual primary care manager was an opportunity to review the implementation of the TRICARE Promise at Fort Carson. This project evaluates the "Promise" beginning with inprocessing to the post through assignment of a primary care manager to what actions are taken when a beneficiary who is an active duty soldier, a family member, or a retiree requires medical care. This project led to a revision of the Welcome Center TRICARE briefing making it more focused towards care at Fort Carson versus a TRICARE overview. It makes recommendations to conform to the TRICARE standard of a Health Enrollment Assessment Review versus the current and outdated Health Risk Appraisal. The study details the formation of primary care manager teams from each of the primary care clinics and how beneficiaries were assigned providers within these teams. The process for active duty sick call was reviewed through the analysis of 326 patient wait tracking tools, 3 months of CHCS patient volume records, and the troop medical clinic floor plans. This analysis determined that over 92 percent of the patients seen at the troop medical clinic with the highest patient volume wait longer than 30 minutes to be seen by a provider and 72 percent of the patients at this clinic wait longer than one hour. This clinic sees an average of 34 patients per day and could easily conduct sick call by appointment, complete sick call by 1215 hours when staffed with three providers, and

increase workload by conducting physicals. Recommendations are made for the conversion to a Health Enrollment Assessment Review Survey and for the Wellness Center to provide more classes on the self-help manual. Another recommendation is for an increase in the number of acute appointments in the templates established with the managed care support contractor and that the troop medical clinic appointments should be made through the contractor and not directly with the clinic.

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1. INTRODUCTION

a. Conditions which prompted the study. The factor that led to this study is an initial Surgeon General directive that TRICARE Prime beneficiaries be enrolled to an individual primary care manager (PCM) and not by teams or clinics no later than 1 January 2000 (Blanck, 1999). This deadline was subsequently changed to 1 July 2000 (Kiley, 2000). Given this directive, it was necessary to analyze the process at Ft. Carson for providing care to all categories of beneficiaries in order to ensure a successful managed care program that includes enrollment to an individual PCM as part of the delivery of primary care services. Primary care services include prevention, health education and counseling, diagnostic and therapeutic services, minor surgery, consultation, and specialty referral.

The managed care program at Ft. Carson begins the first day of inprocessing at the Welcome Center and includes a briefing on TRICARE, completing a CHCS patient registration form, a hearing test, immunizations, and a Health Risk Appraisal. The TRICARE briefing covers the program in general but does not detail how the program works at Ft. Carson specifically. For example, the opportunities available at the Wellness Center or through the Nurse Advice Line are not covered. Soldiers are not told who their PCM will be, the sick call procedures or given an orientation to the locations of the troop medical clinics (TMC) or the hospital. Self-help books are not issued unless the soldier or a family member participates in a separate thirty-minute class held once a month for thirty people at the Wellness Center.

This paper evaluates the managed care program and specifically focuses on identifying the best means to enroll beneficiaries to individual PCMs and the system for delivery of primary care services. The sick call process is integral due to the implication that beneficiaries will be seen by their assigned PCM when they require care. Current enrollment and sick call procedures may not support this.

Ft. Carson MEDDAC supports a beneficiary population of approximately 47,000 TRICARE Prime enrolled lives. It is also a TRICARE Senior Prime demonstration site. This population

includes active duty soldiers, family members, retirees, and their families. The MEDDAC is highly integrated with the hospital at the U.S. Air Force Academy and Peterson Air Force Base thus allowing TRICARE Prime beneficiaries from both the Army and the Air Force to be provided care in either of the facilities based on proximity of the facility to the beneficiary. Therefore, any changes to the PCM enrollment plan must be coordinated with both services and with TriWest Healthcare Alliance, which is the TRICARE managed care support contractor in this region and will be referred to as TriWest throughout the remainder of the paper.

TRICARE Prime beneficiaries at Ft. Carson are enrolled to PCM teams based upon clinics. The teams that support active duty soldiers assigned to MEDDAC and DENTAC and other non-active duty TRICARE Prime beneficiaries are four hospital clinics: the Prime Acute Care Clinic (PACC), the Family Practice Clinic, the Internal Medicine Clinic, and the Pediatric Clinic. Active duty soldiers not assigned to either MEDDAC or DENTAC are assigned to one of three TMCs as their PCMs. This is contradictory to Health Affairs (HA) Policy Letter 96-016 that states that “a location, building, or clinic is not an acceptable PCM”(Joseph, 1995).

As part of the Welcome Center inprocessing, the soldier is also given a Health Risk Appraisal (HRA) that is administered by a member of the Wellness Center and is used to counsel the soldier. The HRA provides the opportunity to quickly identify soldiers who may be at high risk in areas such as high cholesterol or suicide prevention. Soldiers could be referred for required care to an appropriate agency such as mental health or the chaplain or could participate in a program conducted by the Wellness Center. A list of these programs can be found at Appendix A.

All TRICARE Prime enrollees greater than 17 years old to include active duty are supposed to be given a Health Enrollment Assessment Review (HEAR) survey when enrolled as per HA Policy Letter 99-017. This policy letter superseded HA Policy 97-003, Policy for TRICARE Health Enrollment Assessment Review, dated 11 Oct 1996, and HA Policy 98-027, Put Prevention into Practice (PPIP) dated 31 March 98. The HEAR survey is a means to self- report

information in order to identify risk factors that are amenable to intervention and then intervene appropriately. HA Policy 99-017 specifies that military treatment facilities (MTF) are required to develop a system to distribute and collect the HEAR from active duty members within 30 days of arrival in the region and send those completed surveys to the managed care support contractor for processing. It also states that PCMs should be assigned by name or team and that the reports generated from the HEAR survey will be sent by the managed care support contractor to the PCM and the enrollee within 14 days of receipt. Each report received by the PCM is to be analyzed, appropriate intervention taken, and filed in the patient's record. The MTF is also responsible for assigning a PCM code for all collected reports to ensure correct distribution to the PCM. The PCM report will also have a written, signed and dated disposition either on the report itself or on a SF 600 by a member of the PCM team within 30 days of receipt by the MTF and before filing in the medical record (Bailey, 1999).

These requirements are not being met at Ft. Carson. The soldier is not given a HEAR survey upon arrival at the installation. TriWest only mails HEAR surveys to non-active duty personnel. This includes family members of active duty personnel, retirees, their family members and beneficiaries enrolled in TRICARE Senior Prime. In fact, the response rate for HEAR surveys distributed by TriWest for the period of 1 November 1999 through February 2000 was 42 percent (TRICARE Central, 2000).

The HEAR survey is mailed to family members and retirees. Those that are returned to TriWest are assessed and two reports are generated. One is sent to the enrollee to advise them of their health status. The two copies of the second report, the PCM Report, are sent to the TRICARE contracting officer in the Managed Care Division. The PCM Report provides information to the PCM on the enrollee's need for preventive services. The PCM Report also lists health factors, chronic disease history, and self-reported health status and utilization. Additionally, the report identifies any survey areas (i.e., alcohol questions) the patient did not complete.

One copy of the PCM Report is forwarded to medical records for filing in the patient record. The second copy is forwarded to the Wellness Center where they are screened to identify cases that require management. All reports from the Wellness Center are then forwarded to the appropriate clinic with the ones requiring special attention identified in order for the PCM to be informed. The Family Practice Clinic in turn forwards the report to medical records without further review. The Internal Medicine Clinic is currently holding the reports and is awaiting a further decision on their disposition. TMCs 6 and 10 file the report in the soldier's medical record. TMC 7 reviews the report and contacts the soldier if the report indicates a medical condition that requires immediate attention or the soldier has stated a desire to stop smoking for example. The TMC then directs the soldier to the appropriate care. The PCM Report is then filed in the soldier's medical record.

Other reports available through HEAR are not generated. One of these is the PCM Panel report that gives a complete picture of the individuals enrolled to the PCM by identifying the number of smokers, hypertensives, diabetics, etc. per PCM. Finally, the requirement for TriWest to process and return the reports within 14 days is suspended due to the MEDDAC not enrolling by PCM therefore they are unable to provide the linking data that would give TriWest the name of the PCM. This will have to be changed as part of the individual PCM enrollment.

A description of the current sick call process is necessary to fully understand that process and a chart depicting the process is at Appendix B. Currently, active duty soldiers who belong to units with organic medical assets go to their unit aid station for sick call during the period between 0530 and 0600hours. Most soldiers are treated there but some are referred for an appointment with their assigned PA to their supporting TMC for care that exceeds the capability of the aid station. This will be either TMC 7 or TMC 10. Providers from the MEDDAC and deployable units with organic medical support provide the staffing at the TMCs. A table showing unit assignments to TMCs is located at Appendix C.

Soldiers in units that do not have battalion aid stations go directly to either TMC 6 or 7 for traditional sick call between the hours of 0700 and 0800 and are seen by either a MEDDAC or a maneuver unit provider. The traditional sick call process involves the soldier signing in, being screened, and waiting at the TMC to be seen by the physician or physician assistant (PA). This process may take hours depending upon the acuity of the patient and patient load. Both TMCs 6 and 7 have an appointment process for the afternoon yet their policies are different. TMC 6 uses this time for the care of E-7s and above who have called in to schedule a sick call appointment and for patients requiring follow up care as opposed to TMC 7 which only schedules follow up care and does not schedule appointments for senior enlisted and officers. Those patients must sign in during standard sick call hours and may then be told to call the clinic or return later for an appointment.

TMC 10 conducts sick call by appointment and does not have the “traditional” sick call. Soldiers call the clinic to schedule an appointment and a receptionist determines their acuity based upon a series of questions. The level of acuity determines their appointment time with the most acute being seen earlier in the day. At times when a soldier does arrive in the morning without an appointment the soldier is screened and given an appointment time. TMC 10 also schedules appointments for soldiers who have been seen at their unit aid station and need additional care.

Soldiers who require medical care during periods when their servicing TMC is not open go to the hospital emergency department. They are screened and either treated by a provider from the emergency room or are appointed to the PACC. The PACC was open Monday through Friday 0800 – 1930 hours, and Saturdays, Sundays, and holidays 1000 - 2200 hours. It is also open 1000 – 2200 hours if Monday or Friday is a holiday. The weekday hours changed to 1630 – 2030 in order to facilitate PCM enrollment. Additionally, TRICARE Prime enrollees to include soldiers can call the Nurse Advice Line and after following algorithms can be given the phone number to

the after hours PCM for Ft. Carson. This number is for an answering service that will contact the PCM who will call the beneficiary.

Immediately, obvious difficulties with individual PCM enrollment involve information management systems, cost, clinic staffing levels, acuity versus privileging, possible contract modification requirements, and referral procedures. It will also be necessary to change all sick call from the traditional model to by appointment in order for the soldier to be seen by his or her PCM. The difficulty with the information management system is that the systems used separately by the MEDDAC and TriWest cannot communicate with each other. The MEDDAC inputs enrollees and makes appointments in CHCS. TriWest inputs enrollees to CHRIS, which is a proprietary system belonging to a TriWest subcontractor. In order to enroll by individual PCMs from clinics, changes will have to be made in both systems. Dual changes will also be needed when a physician changes due to permanent change of station, for example. This is a time, labor, and possible monetarily intensive issue depending upon the time constraints. A lead time of four to six months would give TriWest adequate time to input the changes without incurring additional expenses such as overtime.

Clinic staffing levels may be a difficulty especially in TMCs supporting units without battalion aid stations. Additional providers may be required in order to meet the TRICARE access standards.

Acuity versus privileging is an issue in instances where like types of providers may not all have the same privileges. For instance, not all family practice physicians conduct pre-natal care and therefore refer their patients to either an obstetrician or another family practice physician.

b. Problem statement: Develop a system that delivers the TRICARE promise to active duty soldiers at Ft. Carson focusing on enrollment by individual PCM and all care provided by appointment to standards or better.

c. Literature Review. The literature review focused on enrollment by PCM and resulted in articles on determining clinical staffing planning factors and patient satisfaction being dependant

upon the patient choosing which physician to be enrolled to. One article included a survey of fifty-four HMOs that determined three common methods of estimating clinical staffing needs. The most common determinant was planned enrollment growth. The second most commonly used measure is appointment waiting time, used by 56.9 percent of the responding HMOs. Those plans probably have target waiting times for specific categories of visits much like the TRICARE access standards of twenty four hours for acute/urgent care, one week for routine care such as a backache, and four weeks for a well/specialty care visit appointment such as an exam. The third measure was expected number of visits based on the population's age and sex distributions.

This study also reported that most group- and staff-model HMOs (59.3 percent) reported that they use specific target member-to-primary-care-physician ratios to estimate staffing needs. Twenty-four responding HMOs reported target ratios between 1,500 and 2,000 members per primary care physician. The single most common target ratio was 2,000 adult members per primary care physician. The median value was 1,800 members per primary care physician, with a mean of 1,713 (Dial, 1995). According to the Primary Care Enrollment Model Proposal, the TRICARE target enrollment rate is 1,500 beneficiaries per primary care provider.

Finally, the clinical staffing ratio study determined the target ratios specifically for pediatric members ranged from one primary care physician per 1,200 members to one per 1,800 members (Dial, 1995).

Patient satisfaction is also an important element in health care. In the TRICARE program, surveys are sent to a random number of patients after an appointment and are analyzed by the TRICARE Management Activity. Currently, this MEDDAC's satisfaction rates remain in the high ninetieth percentile. The method used to change to enrollment by PCM could impact this rate as demonstrated in a survey that linked patient satisfaction to the opportunity to select one's personal physician. This survey conducted in a large group-model HMO in northern California found that among the survey respondents, patients who chose their personal physician were 16 to 20 percentage points more likely to rate their satisfaction as "excellent" or "very good" than

patients who were assigned a physician. The association of choice with satisfaction was not due to physicians with higher patient satisfaction being chosen more often, or to differences in patient demographic or socioeconomic characteristics, health values, or health beliefs, or to differences in physician demographics or specialty. In a logistic regression model that adjusted for all of these characteristics, having chosen one's physician was the single predictor most strongly related to having high overall satisfaction (Schmittiel, 1997).

During a presentation at the 2000 TRICARE Conference, Lieutenant General Paul K. Carlton, Jr., the United States Air Force (USAF) Surgeon General, outlined the USAF standard for progressing to maximal achievable enrollment (MAE). The MAE plan is based upon Primary Care Manager Blocks. Each block is comprised of four primary care managers, two nurses, eight technicians, and four administrative personnel such as clerks. The blocks are designed to provide care for a population of 6000 lives to include those over 65 years old. This allows for a provider to patient ratio of 1 to 1,500 and a support staff ratio of 3.5 to each physician. The physicians are expected to see 25 patients per day and have two rooms available per provider.

Lieutenant General Carlton also addressed the concept of a telephonic nurse triage for patients who call in seeking an appointment. Two surveys – the first in 1997 and again in 1998 – were conducted at Scott Air Force Base. In the first survey, of the 1000 calls analyzed, 17 percent required a provider visit. The nurses handled the remaining 83 percent. The 1998 survey of 1600 calls resulted in comparable findings with 20 percent of the calls requiring a provider visit. This allows for a more effective utilization of appointments with providers (Carlton, 2000).

d. Purpose. The study objectives are to determine how to improve the delivery of health care to our beneficiaries under TRICARE and implement enrollment by individual PCM. This entails an analysis of the current system of enrollment, determining the best course of action to implement enrollment by PCM, analyzing current traditional sick call procedures versus sick call by appointment, and determining the appropriate staffing and facility use to support care by PCM.

2. METHOD AND PROCEDURES

Further investigation will be made to determine inprocessing requirements and to develop a briefing tailored to the TRICARE program at Ft. Carson. This will entail coordination with the personnel in charge of the Welcome Center and the Managed Care Division. In addition, the process for administration, collection, analysis, and utilization of the HEAR survey in accordance with Health Affairs policy will be studied and recommendations made for process improvement. The necessity to educate family members will also be included in a review of the inprocessing period.

This study will also involve the collection of specific data beginning with a sick call assessment. The assessment of sick call procedures will involve determining the number of personnel supported by each TMC and obtaining monthly and daily workload rates per TMC for a three month period of time. Workload rates for unit aid stations will also be required in order to compare against the TMC. This will show what TMC 10's sick call rate would be if soldiers were not provided care at their unit aid station.

It will also be necessary to determine wait times for patients at the TMCs by acuity in order to determine a base line for the amount of time a patient spends away from their unit in the traditional model of sick call versus an appointment model. This data will be collected through a survey that will not interfere with patient care and consists of a buck slip (Appendix D) attached to the patient's record when the patient signs in with the receptionist. The times of sign in, screening, and seen by a provider along with acuity as determined by the provider will be annotated. Wait times will be converted to fifteen-minute increments for analysis. The Ambulatory Data System (ADS) will not be used to determine wait times due to lack of reliability. The current system for signing in, screening, and seeing patients at the TMCs results in ADS sheets not being generated when the patient actually signs in but when the patient is close to being seen. The collection of sick call data should result in approximately three hundred patient

time periods per week available for analysis. An example of the spreadsheet to be used for analysis can be found at Appendix E.

The collected data will then be used to determine the required staffing at the TMCs with the condition of the TRICARE Prime requirement that office wait times will not exceed thirty-minutes. Once the required number of providers is determined, an analysis of the facilities will be conducted to determine available versus required office and exam room space.

An analysis will also be conducted to determine the most efficient means to convert to PCM in regards to the information systems. This analysis will involve determining multiple courses of action with subtasks and costs. There are two immediately apparent options. The first is to automatically assign a patient to a PCM. The second option is to wait until a patient makes a visit and at that time ask the patient which PCM they think they are assigned to and make the assignment then. These options will be investigated with both the Managed Care and Clinical Support Divisions. It will also be necessary to determine if and how the soldier can be informed of the name of their PCM during inprocessing. This will especially be difficult for soldiers being assigned to units that do not have organic battalion aid stations.

3. THE RESULTS and DISCUSSION

The briefing given at the Welcome Center was reviewed and revamped. The current briefing (Appendix F) is designed to lead the soldier from a quick overview of TRICARE to focusing on Prime here in Ft. Carson's Military Health Plan. The briefing describes TRICARE Prime and PCMs. It then focuses on how the system works at Ft. Carson beginning with prevention and lists the programs available at the Wellness Center. The briefing then walks the soldier through how the process works if they or their family member becomes ill beginning with self-care, the nurse advice line, and how to make an appointment to be seen by a professional health care provider. The briefing and concurrent handouts contain pertinent phone numbers for appointments and web site addresses. It also covers out of area care and other health insurance. This briefing is a great

improvement as compared to the previous briefing that was too general and did not focus on health care at Ft. Carson specifically.

As previously stated, the soldier during inprocessing at the Welcome Center completes a HRA that is processed and reviewed by a member of the Wellness Center but is not completing the HEAR survey as directed by Health Affairs. The HRA is given as opposed to the HEAR mainly due to the immediate feedback available through the HRA, which can be processed on site. Also, the Wellness Center, which administers the HRA, has a large quantity of HRAs on hand and does not want to just discard them unused.

There are a number of options available to address the issue of not administering the HEAR. One option is to substitute the HRA with the HEAR survey for local processing and interpretation. This would comply with Health Affairs requirements but would require purchasing the necessary equipment along with required maintenance at a cost of approximately \$20,000 for which the contractor is already being paid. Additionally, the HEAR survey has an approximate 50% rejection rate during processing and results in the requirement to manually input the responses. This difficulty will entail devoting a considerable amount of Wellness Center personnel man hours to data input. This option would have the advantage of immediate and timely feedback to identify potential health risk factors but at a significant cost in equipment and time.

A second option is to substitute the HRA with the HEAR survey and have the completed surveys mailed to the contractor for processing. This fulfills the Health Affairs requirement with a turn around time of 30 days per the contract. The returned reports will then follow the same review pattern as those of family members and retirees. Although timely, this option though does not provide the immediate feedback as the HRA. Medical inprocessing will still include a hearing test, a cholesterol screen, a blood pressure check, and immunizations.

A third option is to have the soldier complete both the HRA and the HEAR while inprocessing. Although this will fulfill Health Affairs requirements and be timely, it will also be

redundant and will likely lead to soldiers not answering the survey as accurately and honestly as possible.

A final option, which is the most feasible, is to administer the HEAR along with a separate survey comprised of HRA questions that are needed to identify immediate intervention requirements such as suicide prevention. The separate survey can be one page and quickly screened by a member of the Wellness Center.

Education and training on the Ft. Carson health care system for family members who could not participate in the Welcome Center briefing is also necessary. Additionally, both soldiers and their family members should receive training on and a copy of the self-help handbook entitled, “Taking Care: Self-care for 100 Common Symptoms and 20 Long-term Ailments.” Neither additional training time nor space is available at the Welcome Center. Also, most family members would not be able to attend these classes during the day. An option to solve the issue of informing and training the family members is to conduct two briefings a month at a location such as the post field house. During this briefing both the Ft. Carson health system briefing and the self-care class would be given along with distribution of the handbooks.

Enrollment of beneficiaries to PCMs is a primary issue that also needs to be addressed. The plan for enrollment begins with the organization of separate clinics into PCM teams. The figure below contains a table showing PCM team organization by primary care clinics. The Family Practice Clinic has 22 providers assigned (12 physicians/5 PAs/5 NPs). These personnel are organized into five teams each consisting of two physicians and either one NP or PA. The Internal Medicine Clinic is staffed with 12 providers - 9 physicians/ 2 PAs/ 1 NPs. This clinic is organized into three teams each comprised of three physicians and either one NP or PA. The Pediatric Clinic, which only has 4 providers, remains organized as one team. The TMCs are organized into one team per TMC and are lead by the officer in charge of the TMC. The differences in team organization reflect the number of personnel assigned and pending personnel

turnover. For example, the Internal Medicine Clinic has 4 of the 12 providers scheduled to either move or depart the Army by the end of June 2000.

Clinic	Physician	Nurse Practitioner	Physician Assistant	Total	Teams
Family Practice	12	5	5	22	5 x (2 physicians & 1 PA or NP)
Internal Medicine	9	1	2	12	3 x (2 physicians & 1 PA or NP)
Pediatrics	3	1	0	4	1

Figure 1. Clinic PCM Team Organization

Creating a plan for arranging appointments was the next area to be addressed and begins when the providers submit their appointment templates to the contractor, TriWest, no later than four weeks out. Appendix G shows the appointment process. When a beneficiary calls the contractor's appointment line for scheduling, the appointment clerk enters the caller's social security number into CHCS and determines which PCM the patient is assigned to. The clerk then uses CHCS to check the PCM's schedule for availability. If that provider is not available within the appropriate access standard the clerk consults a paper that lists the clinic's team organization. The clerk then attempts to appoint the patient to another provider within the patient's PCM's team. If that is not possible the clerk then appoints to whichever provider is available within the clinic. The paper copy of the clinic team organization is necessary due to the inability to list PCM teams in CHCS.

In the event no appointments are available, such as a same day acute visit, the clerk transfers the patient to a designated nurse at the clinic. After talking to the patient, the nurse consults with a physician to determine the most appropriate course of action for the patient. The advantage of this system is that the clinic nurse knows the current status of the clinic and can if necessary make arrangements for the patient to come in and be seen by a provider. If it is determined that an acute appointment is unnecessary and the patient's medical issue is not fully addressed by the

nurse, the clinic schedules the patient for a routine appointment. A more effective means to address the issue of lack of acute appointments is to adjust the template with additional acute appointments. The solution of calling the clinic and talking to a nurse should be by exception only.

A determination on the ratio of provider to assigned beneficiaries also needed to be made. The Office of the Surgeon General memorandum titled Primary Care Manager (PCM) Guidance, May 1998 stated the following beneficiary to provider ratios that had been demonstrated to be optimal in a military setting (Parker, 1998).

Provider Type	Beneficiary to Provider Ratio
<u>Pediatrics</u> - Contract/Civil Service Provider - Military Provider - Clinic Officer in Charge (OIC)	Civilian Standard per literature (1,400-2,000:1) - 2,000:1 (no inpatient responsibilities) - 1,200:1 (limited inpatient responsibilities) - 600:1 (limited inpatient responsibilities)
<u>Pediatric Nurse Practitioner</u> - Contract/Civil Service Provider - Military Provider - Clinic Officer in Charge (OIC)	Civilian Standard (extend physician capabilities) - 1,000:1 (no inpatient responsibilities) - 700:1 (no inpatient responsibilities) - 600:1 (no inpatient responsibilities)
<u>Family Practice</u> - Contract/Civil Service Provider - Military Provider - Clinic Officer in Charge (OIC)	Civilian Standard per literature (2,000-3,000:1) - 2,000:1 (1,000 children/1,000 adults) (no inpatient resps) - 1,600:1 (600 children/1000 adults)(limited inpatient resps) - 800:1 (300 children/500 adults)(limited inpatient resps)
<u>Family /Adult Nurse Practitioner</u> - Contract/Civil Service Provider - Military Provider - Clinic Officer in Charge (OIC)	Civilian Standard (extend physician capabilities) - 1,000:1 (500 children/500 adults) - 800:1 (300 children/500 adults) - 600:1 (300 children/300 adults)
<u>General Medical Officer</u> (serves as part of a family practice team) - Contract/Civil Service Provider - Military Provider	Civilian Standard per literature (2,000-3,000:1) - 2000:1 (all adult patients) - 800:1
<u>Physician Assistants</u> - Contract/Civil Service Provider - Military Provider	Civilian Standard (extend physician capabilities) - 1,000:1 (500 children/500 adults) - 800:1
<u>Internal Medicine</u> - Contract/Civil Service Provider - Military Provider	Civilian Standard per literature (1,100-1,200:1) - 1,100:1 (limited inpatient responsibilities) - 600:1 (limited inpatient responsibilities)

Figure 2. OTSG Beneficiary to Provider Ratios

This facility has determined to use the following beneficiary to provider ratios.

	Physician	Physician Assistant	Nurse Practitioner
Family Practice	1,200	1,000	900
Internal Medicine	800	500	500
Pediatrics	1500	N/A	N/A
TMC	750	750	N/A

Figure 3. MEDDAC, Ft. Carson Beneficiary to Provider Ratios

Beneficiaries will not be assigned to physicians working in the PACC. These physicians will be used during duty hours to either backfill or to provide additional providers in the individual clinics when patient volume exceeds capability. The weekday hours for the PACC changed to 1600 – 2200hrs. The exception to the assignment of beneficiaries will be two members of the PACC who will be appointed as the officers in charge (OIC) of TMC 6 and TMC 7. These are the clinics supporting units that do not have organic medical support. Soldiers from those units will be assigned to the TMC OIC as their PCM. In units with organic medical support, soldiers will be assigned to the unit provider as their PCM.

Once the ratios of beneficiaries to providers were determined, it was then necessary to assign the beneficiaries to the providers. A need to maintain established doctor/patient relationships was identified as a key aspect in assignments. This was accomplished by having the Managed Care Division conduct a query for patients who had a determined number of visits to the same provider within the past year. The number of visits for the query varied by clinic. These reports were given to the providers who screened them and identified patients to be assigned to them. Once those assignments were made the remaining assignments were filled at random.

Currently, both CHCS and CRIS interface with DEERS but not directly with each other. The implication is that assignments to PCM would have to be entered twice – once in CHCS and another time in CRIS. TriWest could incur additional costs that would be passed on to the MEDDAC depending upon the time frame for implementation and their requirement to expedite

assignments. A lead time of six months would not incur any additional costs where as a lead time of two months would. Exact figures of those costs were not available.

The difficulty of having to enter PCM enrollment twice is being addressed by the implementation of the National Enrollment Database (NED) which is a desktop application of DEERS. The local TRICARE Service Center inputs data to include PCM assignment when the soldier inprocesses and this information is fed to DEERS. DEERS forwards the information to CHCS thus eliminating the requirement for a CHCS manual entry. This system is scheduled to be implemented by 7 August 2000.

Notification of beneficiaries of assignment to a PCM is also a requirement in the PCM enrollment process. TriWest will send the beneficiary a letter informing them which PCM they are assigned to. A copy of a draft letter is located in Appendix H. This letter will also allow them to request a change to their PCM within a specified time frame if they are not satisfied with their assignment.

The plan for implementation of PCM enrollment is currently undergoing review by TriWest. The Regional Medical Command is in receipt of guidance from MEDCOM and has issued additional guidance in order to standardize the process with the contractor throughout the region.

Another issue with delivering the TRICARE promise at Ft. Carson is active duty sick call. As noted previously two of the TMCs conduct traditional sick call. A patient wait tracking tool was used during the period from November 1999 through February 2000 to develop a basis to compare sick call waiting times during traditional sick call with waiting times once sick call by appointment is implemented. Four hundred and forty one of the nine hundred and eighty five tracking tools collected were used for the survey. Six hundred and twenty eight of the tools were discarded due to times not being annotated or an acuity level not being circled. The following figure details the total tracking tools collected.

TMC	Collected	Used	Urgent	Priority	Routine
6	280	199	1	28	170
7	366	125	2	10	113
10	339	117	1	8	108
Total	985	441	4	46	391

Figure 4. Patient Wait Tracking Tool Summary

The TRICARE access standard for waiting time is 30 minutes. Unfortunately, a majority of the soldiers seeking care in the TMCs are waiting for a far longer time as depicted in the following figure.

TMC	1-15 Minutes	15 – 30 Minutes	31 – 45 Minutes	46 – 60 Minutes	> 60 Minutes	Total > 30 Minutes
6	2	6	6	14	72	92
7	19	24	12	10	34	56
10	21	47	21	9	2	32

Figure 5. TMC Waiting Time Percentages (Sign in to Seen by Provider)

TMC 6 has a significantly larger number of soldiers waiting for care longer than 60 minutes than either of the two other TMCs. This is a result of the TMC 6 OIC's policy of limiting the level of care the medics are able to provide and requiring that he see all patients. Medics in TMC 7 are allowed to provide care through Category IV of the Algorithm Directed Troop Medical Care assessment. This allows medics to treat minor illnesses such as sore throats and colds without the patient having to be seen by a physician. Additionally, TMC 10 only does sick call by appointment therefore it is expected that the waiting time there be much lower. However, twelve of the 15 units supported by TMC 10 have organic medical support such as battalion aid stations where soldiers are screened and treated in the traditional sick call manner. These aid stations see an average of 130 patients on sick call per month with a standard deviation of 55.

The number of patients seen per day at the TMCs is shown in figures 5 and 6. This data was gathered from CHCS and represents the months of October 1999 through January 2000. The half day periods over the holidays and training holidays were excluded and resulted in the data representing 68 days. Additionally, Thursday mornings were excluded due to the TMCs not

providing care and conducting training during that period. This led to a further decrement of 13 days.

TMC	With Thursday (68 days)		Without Thursday (55 days)	
	Mean	Standard Deviation	Mean	Standard Deviation
6	34.2	18.1	41.5	11.5
7	28.7	15.9	34.9	12.4
10	72.1	28.2	82.6	19.9

Figure 6. TMC Average Daily Patient Census
October 1999 – January 2000

TMC	Mean	Standard Deviation
6	8.8	4.1
7	9.3	4.4
10	42.8	11.7

Figure 7. TMC Average Thursday Patient Census
October 1999 – January 2000

Provider requirements should be determined based on TMC 6 data due to that TMC having the largest volume. Patient hours in this TMC are from 0730hrs through 1500hrs. This results in 6.5 patient care hours available for appointments after subtracting a one hour lunch period. If the clinic is staffed with one provider conducting 20 minute appointments and another provider then conducting 15 minute appointments, 52 patients can be seen daily. The remaining two patients that may need to be seen when planning for one standard deviation can easily be worked into the schedule due to some appointments not requiring the allotted time. In order to expand care from the current status of solely sick call to including physicals, an additional provider with 15 minute appointments can be scheduled. This will increase the number of available patient care appointments to 71 per day and easily support care up to two standard deviations, which would cover 98% of sampled patient volume (See Figure 8, pg. 24). Three providers could complete 52 sick call appointments in approximately 4 hours and 45 minutes therefore ending sick call by 1215hrs. The clinic could close for lunch and reopen in the afternoon for active duty physicals, which are currently only being done at TMC 10.

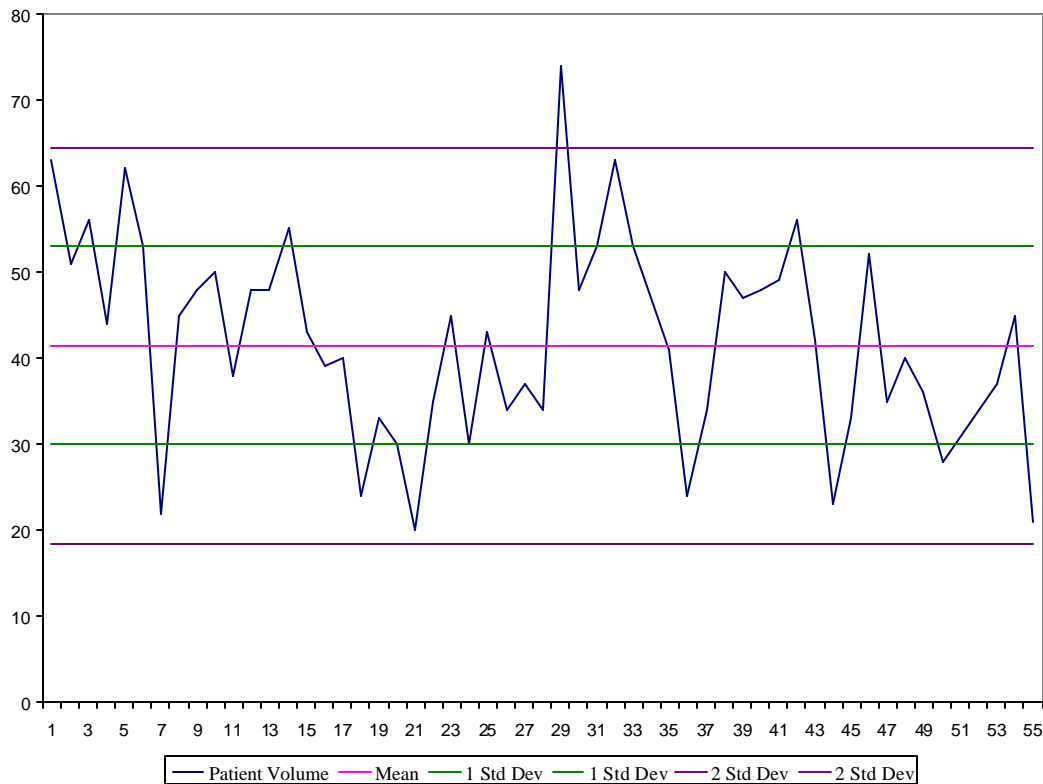


Figure 8. TMC 6 Patient Volume

A review of the floor plans for TMCs 6 and 7 located at Appendices I and J show that both facilities can easily support three providers. TMC 6 currently has five exam rooms and a treatment room available for care. Four of the exam rooms are configured to double as offices for providers. TMC 7 also has five exam rooms and a treatment room. Three of the exam rooms double as provider offices. The only possible problem with the number of rooms available is that one provider may only be able to see patients in one room at a time. Therefore the support staff would not be able to position a patient in a room awaiting the provider and result in a less efficient system. The provider's time will not be as effectively utilized as possible while waiting for the next patient to be led to the office.

The traditional sick call technique must be changed in order to realize the possibilities from both the patient volume and TMC floor plan analysis. The TMCs must go to an appointment system or soldiers will continue to wait for care well beyond the TRICARE access standards.

Currently at TMC 10, soldiers make an appointment directly with the TMC. This should be changed to all soldiers who need an appointment with the TMC making an appointment through TriWest. The exception to this would be soldiers who received initial care at their unit aid station and were told to meet their PA at the TMC for specific care that is beyond the capabilities of the unit aid station. A diagram depicting the process is located at Appendix K.

Additionally, traditional sick call will continue at the unit aid stations. Physical space is not available at the TMCs for soldiers from units with aid stations to receive primary care at that location. If a consolidated TMC is built to replace TMCs 6 and 7 a plan should be considered to move unit aid station care to the new TMC also and provide care by appointment.

4. CONCLUSIONS & RECOMMENDATIONS

The purpose of this project was to develop a system that delivers the TRICARE promise to active duty soldiers and beneficiaries at Fort Carson focusing on enrollment by PCM and all care provided by appointment. The results of the project demonstrate that the TRICARE promise can be delivered to all beneficiaries to include active duty given the correct utilization of resources. The changing of the Welcome Center TRICARE brief to one focused on the Ft. Carson system is the beginning in the delivery of the promise. Not issuing a HEAR survey and the collected TMC sick call data has definitively shown that certain TRICARE standards do not apply to active duty troops who are supposed to be the TRICARE priority. One of the first recommendations is for inprocessing soldiers to receive a HEAR survey along with a one page questionnaire that identifies immediate health issues. This will meet the Health Affairs guidance and provide timely feedback. Additionally, as part of inprocessing staff from the Wellness Center and the Managed care Division should provide bimonthly briefings to family members on the health care system at Ft. Carson and the self-help handbook.

TRICARE access standards should apply for soldiers as well as for other beneficiaries. TMCs should convert to sick call by appointment. The soldier should make appointments through TriWest and appointment times should be algorithm based. This will involve a considerable

amount of training of unit leadership but in the end is better for the unit, the TMC, and most importantly the soldier. Additionally, the primary care clinics, to include the TMCs, should assess the amount of patients referred from TriWest appointment clerk to the triage nurse and determine if their template should include additional acute appointments. Proper staffing of and design of appointment templates at the TMCs will allow for timely care, an increase in workload through conducting physicals, and a better use of soldier time.

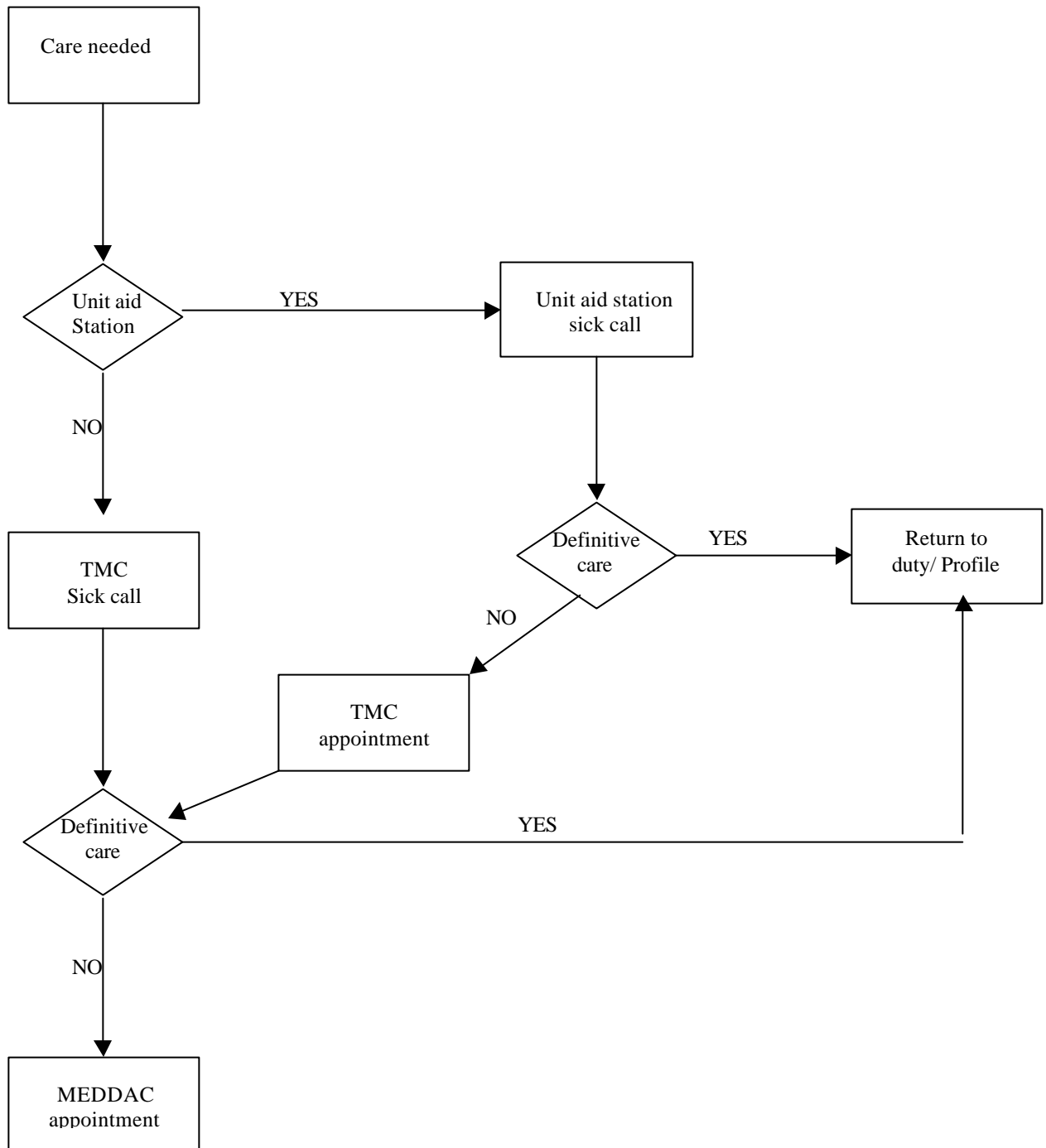
The enrollment of beneficiaries to PCMs is well planned and is progressing well. The process should become far less complicated once updated systems are in place for enrollment and appointments. The implementation of the National Enrollment Database will greatly facilitate this process and allow for full portability.

The delivery of the TRICARE “Promise” at Ft. Carson is still not fully realized. However, the tools and desire to accomplish this are present. Significant improvement has been made during the course of this project and the foundations for further improvements are firmly set.

Appendix A (Wellness Center Programs)

Screenings	Exercise
Cholesterol	Fitness Assessment
5 Day Blood Pressure	Gait Evaluation
Health Risk Appraisal	Exercise Prescription
Classes	ACS Programs
Anger Management	Strengthen Step Families
Arthritis Management	New Parent Support Group
Back Health	Nurturing
Cholesterol Education	Single Parent Group
Diabetes Education	
Ergonomics	
Gym Orientation	
Healthy Cooking	
Increasing Your Memory	
Relationship Enhancement	
Self Care Instruction	
Shape Up After Pregnancy	
Stress Management	
Time Management	
Tobacco Cessation	

Appendix B
(Current Sick Call Process)



Appendix C
(TMC Assignments)

TMC 6	TMC 7	TMC 10	MEDDAC
68 th Corps Spt Bn 4 th Personnel Spt Bn 4 th Finance Bn 52d Engineer Bn 5 th Armor Trng Bde	10 th CSH 759 th MP Bn USAG	10 th SF Group (Abn) 3d Bde/4 th ID 3d ACR	MEDDAC DENTAC CID

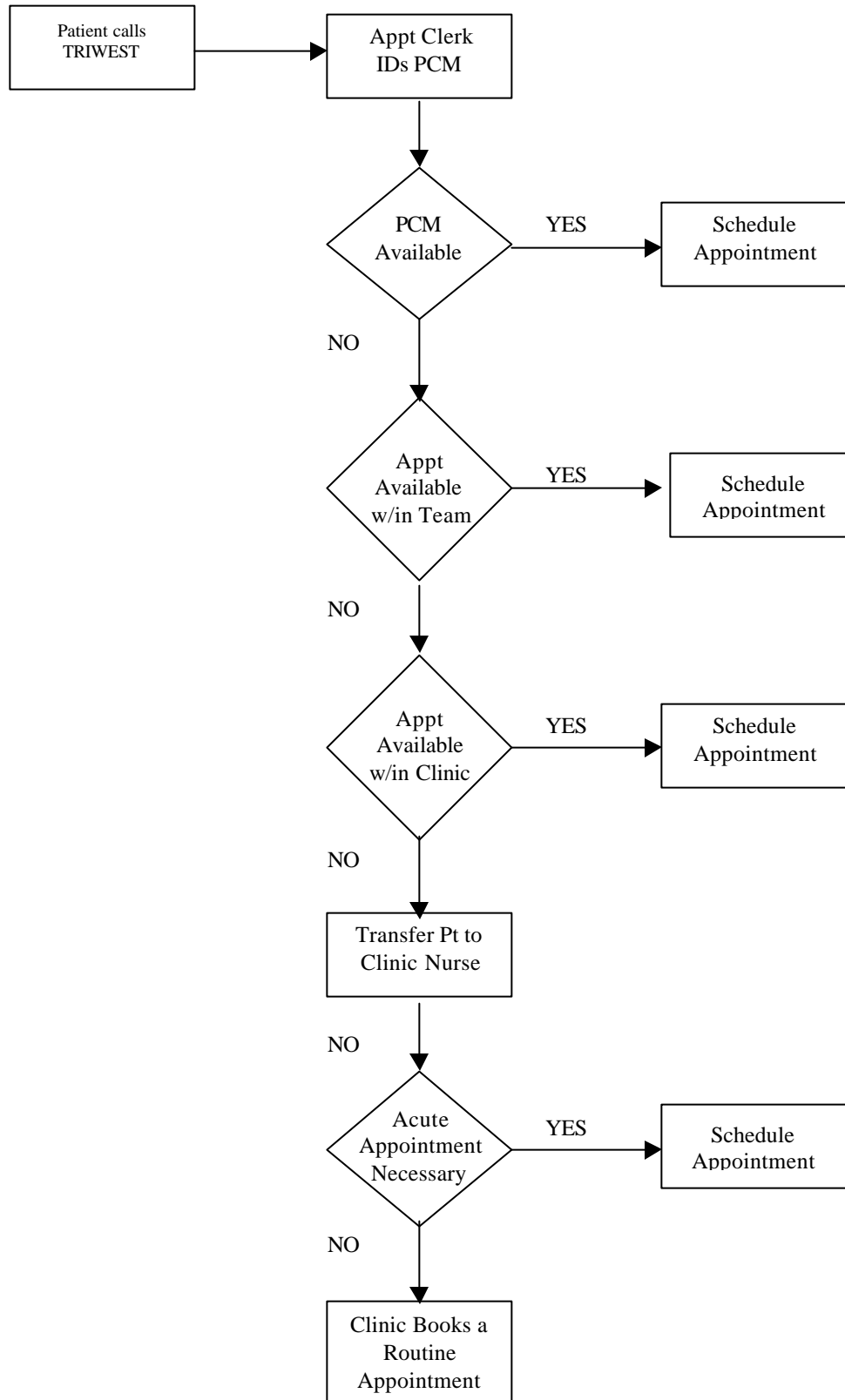
Appendix D
(Patient Wait Tracking Tool)

SERVICE	TIME SEEN	STAFF INITIALS	
Sign-in/front desk	_____	_____	
Screening	_____	_____	
Provider	_____	_____	
Acuity (circle):	Urgent	Priority	Routine
TMC #:_____	Date:_____		

Appendix E
(Wait Time Data Sheet)

Appendix F
(Welcome Center Brief)

Appendix G
(Appointment Process)



Appendix H
(PCM Letter)

Mrs. Brett Walker
1234 Hollow Way
Colorado Springs, CO 80914

Dear Mrs Walker:

In an effort to provide better continuity of care U.S. Army MEDDAC, Fort Carson will assign all of it's enrolled population to a Primary Care Manager (PCM).

You have been assigned to Internal Medicine Clinic Team A, Dr. Duncan.

If you are not happy with this assignment please tear off the bottom portion of this form and return it to TriWest by 31 MAR 00. You may choose from any of the providers below and every attempt will be made to accommodate you.

Dr. Smith
Dr. Abel

PA Jones
Dr. Amar

PA Conners
NP Swan

.....

Please change my provider to _____.

Name_____ SSN_____

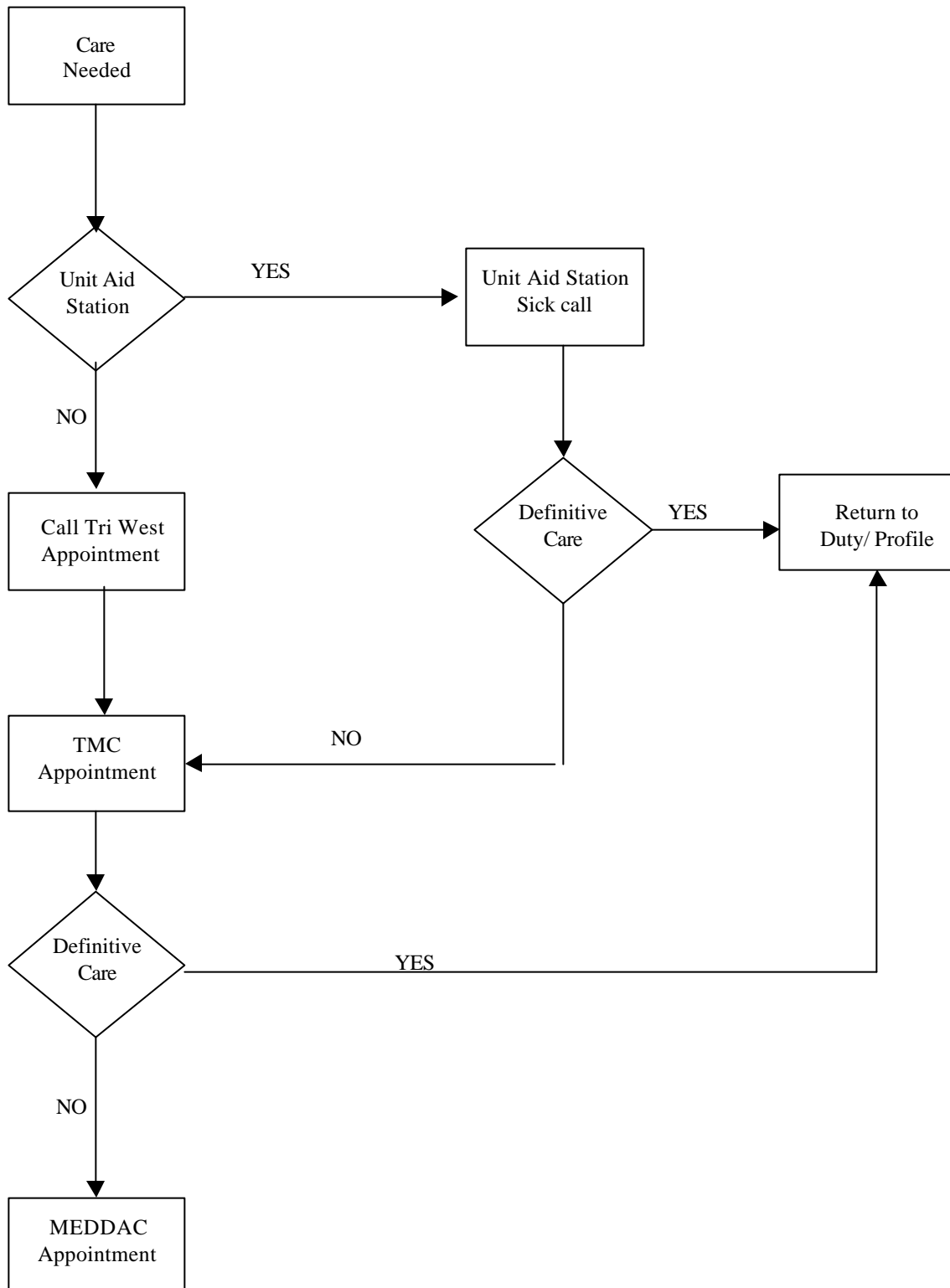
Address_____

Mail response no later than 31 March 2000 to TriWest,

Appendix I
TMC 6 Floor Plan

Appendix J
TMC 7 Floor Plan

Appendix K
(Proposed Sick Call Process)



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